

**Most Frequently Occurring Classifications of Patents Returned
From A PLUS Search of 09/816,148 on May 06, 2002**

Original Classifications

4 205/731
3 204/196.11
2 29/455.1
2 204/196.02
2 204/196.05
2 204/196.15
2 204/196.16
2 204/196.33
2 204/196.34
2 205/733
2 205/740
2 439/42

Cross-Reference Classifications

8 204/196.23
8 392/457
6 204/196.16
6 205/733
5 204/196.15
5 204/196.18
5 204/196.19
5 204/280
5 205/732
4 122/13.01
4 204/196.24
3 204/196.25
3 204/196.37
3 204/196.38
3 204/290.12
3 204/290.14
3 205/730
3 205/731
3 205/735
3 205/740
2 29/458
2 29/469
2 126/361.1
2 138/DIG 6
2 204/196.1

Combined Classifications

9 204/196.23
8 204/196.16
8 205/733
8 392/457
7 204/196.15
7 205/731
6 204/196.18
6 204/196.19
6 204/280
5 205/732
5 205/740
4 122/13.01
4 204/196.11
4 204/196.24
3 29/458
3 204/196.02
3 204/196.1
3 204/196.17
3 204/196.25
3 204/196.33
3 204/196.37
3 204/196.38
3 204/290.12
3 204/290.14
3 205/730
3 205/735
2 29/455.1
2 29/469
2 122/19.2
2 126/361.1
2 138/DIG 6
2 204/196.05
2 204/196.07
2 204/196.21
2 204/196.26
2 204/196.3
2 204/196.31
2 204/196.34
2 204/288.1

Cross-Reference Classifications

2 204/196.17
2 204/196.21
2 204/196.26
2 204/196.3
2 204/196.31
2 204/288.1
2 204/292
2 204/293
2 205/734
2 228/184

Combined Classifications

2 204/292
2 204/293
2 205/734
2 228/184
2 439/42

Titles of Most Frequently Occurring Classifications of Patents Returned
From A PLUS Search of 09/816,148 on May 06, 2002

- 9 204/196.23 (1 OR, 8 XR)
Class 204: CHEMISTRY: ELECTRICAL AND WAVE ENERGY
204/193 APPARATUS
204/194 .Electrolytic
204/196.01 ..Object protection
204/196.1 ...Internal battery
204/196.23Anode contains aluminum
- 8 204/196.16 (2 OR, 6 XR)
Class 204: CHEMISTRY: ELECTRICAL AND WAVE ENERGY
204/193 APPARATUS
204/194 .Electrolytic
204/196.01 ..Object protection
204/196.1 ...Internal battery
204/196.15With fluid inlet or outlet means used or protected
204/196.16Dielectric coating, casing, or section
- 8 205/733 (2 OR, 6 XR)
Class 205: ELECTROLYSIS: PROCESSES, COMPOSITIONS USED THEREIN, AND METHODS OF PREPARING THE COMPOSITIONS
205/687 ELECTROLYTIC MATERIAL TREATMENT (PRODUCT, PROCESS, AND ELECTROLYTE COMPOSITION)
205/704 .Metal or metal alloy
205/724 ..Object protection
205/730 ...Internal battery action (e.g., using sacrificial anode, etc.)
205/731Ferrous metal
205/733Using anode containing magnesium
- 8 392/457 (0 OR, 8 XR)
Class 392: ELECTRIC RESISTANCE HEATING DEVICES
392/441 .Tank or container type liquid heater
392/449 ..Line connected tank
392/451 ...With immersion heating element
392/457With protecting means against galvanic corrosion
- 7 204/196.15 (2 OR, 5 XR)
Class 204: CHEMISTRY: ELECTRICAL AND WAVE ENERGY
204/193 APPARATUS
204/194 .Electrolytic
204/196.01 ..Object protection
204/196.1 ...Internal battery
204/196.15With fluid inlet or outlet means used or protected
- 7 205/731 (4 OR, 3 XR)
Class 205: ELECTROLYSIS: PROCESSES, COMPOSITIONS USED THEREIN, AND METHODS OF PREPARING THE COMPOSITIONS
205/687 ELECTROLYTIC MATERIAL TREATMENT (PRODUCT, PROCESS, AND ELECTROLYTE COMPOSITION)
205/704 .Metal or metal alloy
205/724 ..Object protection
205/730 ...Internal battery action (e.g., using sacrificial anode, etc.)
205/731Ferrous metal

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6 204/196.18 (1 OR, 5 XR)

Class 204: CHEMISTRY: ELECTRICAL AND WAVE ENERGY

204/193 APPARATUS

204/194 .Electrolytic

204/196.01 ..Object protection

204/196.1 ...Internal battery

204/196.17Rigid anode with rigid support

204/196.18More than half of anode is or has coating, covering, or shield

6 204/196.19 (1 OR, 5 XR)

Class 204: CHEMISTRY: ELECTRICAL AND WAVE ENERGY

204/193 APPARATUS

204/194 .Electrolytic

204/196.01 ..Object protection

204/196.1 ...Internal battery

204/196.17Rigid anode with rigid support

204/196.18More than half of anode is or has coating, covering, or shield

204/196.19Dielectric coating, covering, or shield

6 204/280 (1 OR, 5 XR)

Class 204: CHEMISTRY: ELECTRICAL AND WAVE ENERGY

204/193 APPARATUS

204/194 .Electrolytic

204/279 ..Elements

204/280 ...Electrodes

5 205/732 (0 OR, 5 XR)

Class 205: ELECTROLYSIS: PROCESSES, COMPOSITIONS USED THEREIN, AND METHODS OF PREPARING THE COMPOSITIONS

205/687 ELECTROLYTIC MATERIAL TREATMENT (PRODUCT, PROCESS, AND ELECTROLYTE COMPOSITION)

205/704 .Metal or metal alloy

205/724 ..Object protection

205/730 ...Internal battery action (e.g., using sacrificial anode, etc.)

205/731Ferrous metal

205/732Using anode containing aluminum

5 205/740 (2 OR, 3 XR)

Class 205: ELECTROLYSIS: PROCESSES, COMPOSITIONS USED THEREIN, AND METHODS OF PREPARING THE COMPOSITIONS

205/687 ELECTROLYTIC MATERIAL TREATMENT (PRODUCT, PROCESS, AND ELECTROLYTE COMPOSITION)

205/704 .Metal or metal alloy

205/724 ..Object protection

205/740 ...Vessel (e.g., ship hull, steam boiler, etc.)

4 122/13.01 (0 OR, 4 XR)

Class 122: LIQUID HEATERS AND VAPORIZERS

122/13.01 STAND BOILER (E.G., WATER HEATER, ETC.)

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- 4 204/196.11 (3 OR, 1 XR)
 - Class 204: CHEMISTRY: ELECTRICAL AND WAVE ENERGY
 - 204/193 APPARATUS
 - 204/194 .Electrolytic
 - 204/196.01 ..Object protection
 - 204/196.1 ...Internal battery
 - 204/196.11Resistor or impedance in series between anode and object

- 4 204/196.24 (0 OR, 4 XR)
 - Class 204: CHEMISTRY: ELECTRICAL AND WAVE ENERGY
 - 204/193 APPARATUS
 - 204/194 .Electrolytic
 - 204/196.01 ..Object protection
 - 204/196.1 ...Internal battery
 - 204/196.23Anode contains aluminum
 - 204/196.24And magnesium

- 3 29/458 (1 OR, 2 XR)
 - Class 029: METAL WORKING
 - 29/592 METHOD OF MECHANICAL MANUFACTURE
 - 29/428 .Assembling or joining
 - 29/458 ..With coating before or during assembling

- 3 204/196.02 (2 OR, 1 XR)
 - Class 204: CHEMISTRY: ELECTRICAL AND WAVE ENERGY
 - 204/193 APPARATUS
 - 204/194 .Electrolytic
 - 204/196.01 ..Object protection
 - 204/196.02 ...With control means responsive to sensed condition

- 3 204/196.1 (1 OR, 2 XR)
 - Class 204: CHEMISTRY: ELECTRICAL AND WAVE ENERGY
 - 204/193 APPARATUS
 - 204/194 .Electrolytic
 - 204/196.01 ..Object protection
 - 204/196.1 ...Internal battery

- 3 204/196.17 (1 OR, 2 XR)
 - Class 204: CHEMISTRY: ELECTRICAL AND WAVE ENERGY
 - 204/193 APPARATUS
 - 204/194 .Electrolytic
 - 204/196.01 ..Object protection
 - 204/196.1 ...Internal battery
 - 204/196.17Rigid anode with rigid support

- 3 204/196.25 (0 OR, 3 XR)
 - Class 204: CHEMISTRY: ELECTRICAL AND WAVE ENERGY
 - 204/193 APPARATUS
 - 204/194 .Electrolytic
 - 204/196.01 ..Object protection
 - 204/196.1 ...Internal battery
 - 204/196.23Anode contains aluminum
 - 204/196.25And zinc

**Titles of Most Frequently Occurring Classifications of Patents Returned
From A PLUS Search of 09/816,148 on May 06, 2002**

- 3 204/196.33 (2 OR, 1 XR)
Class 204: CHEMISTRY: ELECTRICAL AND WAVE ENERGY
204/193 APPARATUS
204/194 .Electrolytic
204/196.01 ..Object protection
204/196.33 ...Flexible cable, chain, or wire anode or support
- 3 204/196.37 (0 OR, 3 XR)
Class 204: CHEMISTRY: ELECTRICAL AND WAVE ENERGY
204/193 APPARATUS
204/194 .Electrolytic
204/196.01 ..Object protection
204/196.37 ...Vessel protected (e.g., steam boiler, etc.)
- 3 204/196.38 (0 OR, 3 XR)
Class 204: CHEMISTRY: ELECTRICAL AND WAVE ENERGY
204/193 APPARATUS
204/194 .Electrolytic
204/196.01 ..Object protection
204/196.38 ...Anode contains precious metal or free carbon
- 3 204/290.12 (0 OR, 3 XR)
Class 204: CHEMISTRY: ELECTRICAL AND WAVE ENERGY
204/193 APPARATUS
204/194 .Electrolytic
204/279 ..Elements
204/280 ...Electrodes
204/290.01Laminated or coated (i.e., composite having two or more layers)
204/290.12Refractory metal (i.e., Ti, V, Cr, Zr, Nb or Cb, Mo, Hf, Ta, or W) or compound containing
- 3 204/290.14 (0 OR, 3 XR)
Class 204: CHEMISTRY: ELECTRICAL AND WAVE ENERGY
204/193 APPARATUS
204/194 .Electrolytic
204/279 ..Elements
204/280 ...Electrodes
204/290.01Laminated or coated (i.e., composite having two or more layers)
204/290.14Noble metal (i.e., Ru, Rh, Pd, Os, Ir, Pt, Ag, or Au) or compound containing
- 3 205/730 (0 OR, 3 XR)
Class 205: ELECTROLYSIS: PROCESSES, COMPOSITIONS USED THEREIN, AND METHODS OF PREPARING THE COMPOSITIONS
205/687 ELECTROLYTIC MATERIAL TREATMENT (PRODUCT, PROCESS, AND ELECTROLYTE COMPOSITION)
205/704 .Metal or metal alloy
205/724 ..Object protection
205/730 ...Internal battery action (e.g., using sacrificial anode, etc.)

Titles of Most Frequently Occurring Classifications of Patents Returned
From A PLUS Search of 09/816,148 on May 06, 2002

- 3 205/735 (0 OR, 3 XR)
 - Class 205: ELECTROLYSIS: PROCESSES, COMPOSITIONS USED THEREIN, AND METHODS OF PREPARING THE COMPOSITIONS
 - 205/687 ELECTROLYTIC MATERIAL TREATMENT (PRODUCT, PROCESS, AND ELECTROLYTE COMPOSITION)
 - 205/704 .Metal or metal alloy
 - 205/724 ..Object protection
 - 205/735 ...Ferrous metal

- 2 29/455.1 (2 OR, 0 XR)
 - Class 029: METAL WORKING
 - 29/592 METHOD OF MECHANICAL MANUFACTURE
 - 29/428 .Assembling or joining
 - 29/455.1 ..Spaced wall tube or receptacle

- 2 29/469 (0 OR, 2 XR)
 - Class 029: METAL WORKING
 - 29/592 METHOD OF MECHANICAL MANUFACTURE
 - 29/428 .Assembling or joining
 - 29/469 ..Assembling a subassembly, then assembling with a second subassembly

- 2 122/19.2 (1 OR, 1 XR)
 - Class 122: LIQUID HEATERS AND VAPORIZERS
 - 122/13.01 STAND BOILER (E.G., WATER HEATER, ETC.)
 - 122/19.2 .And casing feature for stand boiler or external water tank therefor

- 2 126/361.1 (0 OR, 2 XR)
 - Class 126: STOVES AND FURNACES
 - 126/383.1 ..Collecting, directing, or shielding feature for overflow or spatter of the liquid
 - 126/361.1 .Boiler receiving hot liquid or steam from stove or furnace (e.g., kitchen boiler, range boiler, etc.)

- 2 138/DIG 6 (0 OR, 2 XR)
 - Class 138: PIPES AND TUBULAR CONDUITS
 - 138/DIG 6 Corrosion

- 2 204/196.05 (2 OR, 0 XR)
 - Class 204: CHEMISTRY: ELECTRICAL AND WAVE ENERGY
 - 204/193 APPARATUS
 - 204/194 .Electrolytic
 - 204/196.01 ..Object protection
 - 204/196.05 ...With programmed, cyclic, or time responsive control means

- 2 204/196.07 (1 OR, 1 XR)
 - Class 204: CHEMISTRY: ELECTRICAL AND WAVE ENERGY
 - 204/193 APPARATUS
 - 204/194 .Electrolytic
 - 204/196.01 ..Object protection
 - 204/196.06 ...With measuring, testing, or sensing means
 - 204/196.07Internal battery

**Titles of Most Frequently Occurring Classifications of Patents Returned
From A PLUS Search of 09/816,148 on May 06, 2002**

- 2 204/196.21 (0 OR, 2 XR)
Class 204: CHEMISTRY: ELECTRICAL AND WAVE ENERGY
204/193 APPARATUS
204/194 .Electrolytic
204/196.01 ..Object protection
204/196.1 ...Internal battery
204/196.21Earth grounded object or protection means
- 2 204/196.26 (0 OR, 2 XR)
Class 204: CHEMISTRY: ELECTRICAL AND WAVE ENERGY
204/193 APPARATUS
204/194 .Electrolytic
204/196.01 ..Object protection
204/196.26 ...Resistor or impedance in series between power supply and object
- 2 204/196.3 (0 OR, 2 XR)
Class 204: CHEMISTRY: ELECTRICAL AND WAVE ENERGY
204/193 APPARATUS
204/194 .Electrolytic
204/196.01 ..Object protection
204/196.3 ...Rigid anode with rigid support
- 2 204/196.31 (0 OR, 2 XR)
Class 204: CHEMISTRY: ELECTRICAL AND WAVE ENERGY
204/193 APPARATUS
204/194 .Electrolytic
204/196.01 ..Object protection
204/196.3 ...Rigid anode with rigid support
204/196.31Threaded coupling for rigid anode or rigid support
- 2 204/196.34 (2 OR, 0 XR)
Class 204: CHEMISTRY: ELECTRICAL AND WAVE ENERGY
204/193 APPARATUS
204/194 .Electrolytic
204/196.01 ..Object protection
204/196.33 ...Flexible cable, chain, or wire anode or support
204/196.34Plural anode sections on single cable, chain, or wire
- 2 204/288.1 (0 OR, 2 XR)
Class 204: CHEMISTRY: ELECTRICAL AND WAVE ENERGY
204/193 APPARATUS
204/194 .Electrolytic
204/279 ..Elements
204/280 ...Electrodes
204/286.1With electrode supporting means
204/288.1And dielectric gasket or spacer

Titles of Most Frequently Occurring Classifications of Patents Returned
From A PLUS Search of 09/816,148 on May 06, 2002

- 2 204/292 (0 OR, 2 XR)
Class 204: CHEMISTRY: ELECTRICAL AND WAVE ENERGY
204/193 APPARATUS
204/194 .Electrolytic
204/279 ..Elements
204/280 ...Electrodes
204/291Composition
204/292Metallic
- 2 204/293 (0 OR, 2 XR)
Class 204: CHEMISTRY: ELECTRICAL AND WAVE ENERGY
204/193 APPARATUS
204/194 .Electrolytic
204/279 ..Elements
204/280 ...Electrodes
204/291Composition
204/292Metallic
204/293Alloys
- 2 205/734 (0 OR, 2 XR)
Class 205: ELECTROLYSIS: PROCESSES, COMPOSITIONS USED THEREIN, AND METHODS OF PREPARING THE COMPOSITIONS
205/687 ELECTROLYTIC MATERIAL TREATMENT (PRODUCT, PROCESS, AND ELECTROLYTE COMPOSITION)
205/704 .Metal or metal alloy
205/724 ..Object protection
205/734 ...Metal imbedded in asphalt, concrete, stone, or masonry, (e.g., reinforced concrete, etc.)
- 2 228/184 (0 OR, 2 XR)
Class 228: METAL FUSION BONDING
228/101 PROCESS
228/178 .Plural joints
228/182 ..Of mechanical article
228/184 ...Pressure vessels, tanks, and container-type structures
- 2 439/42 (2 OR, 0 XR)
Class 439: ELECTRICAL CONNECTORS
439/41 WITH VACUUM APPLYING MEANS. E.G., SUCTION CUP
439/42 .To urge mating connectors or contacts together

**List of Patents Returned in Closeness Factor Order
from a PLUS Search of 09/ 816,148 on May 06, 2002**

<u>Patent No.</u>	<u>Closeness Factor</u>	<u>Patent No.</u>	<u>Closeness Factor</u>
6,331,242	85	4,848,616	66
5,176,807	81	4,087,742	65
4,786,383	81	4,051,007	65
6,224,743	81	4,457,821	64
5,505,826	80	4,255,647	64
5,728,275	78	4,437,957	64
5,853,553	78	4,936,969	64
5,855,747	78	4,038,168	64
5,547,311	75	4,511,444	64
5,305,631	75	4,623,435	64
5,339,911	75	5,649,591	64
5,910,236	75	4,306,189	63
4,855,029	72	4,773,977	63
4,407,711	70	4,783,896	63
4,434,039	70	4,838,208	63
5,344,781	68	4,879,801	63
6,213,784	68	3,864,234	61
4,035,903	68	4,171,254	61
4,267,029	68	4,397,726	61
4,251,343	67	4,778,949	61
5,324,397	67	6,206,742	61
3,855,102	67	3,907,658	61
5,256,267	66	4,972,066	60
5,334,299	66	4,975,560	60